



SERIAL NO: 09/776,025

## **ABSTRACT**

The helical rotary cutter includes a cylinder with a plurality of grooves that extend from one cylinder end to the other end. Each groove has a leading groove wall and a trailing groove wall. The leading groove is in a first wall plane that extends outwardly away from the rotor axis in the direction of rotation and intersects the rotor axis. The trailing groove wall is in a second wall plane that extends outwardly away from the rotor axis in the direction of rotation and intersects the rotor axis. A plurality of first base support surfaces are each in a base support plane, perpendicular to the first wall plane and intersect each other. A plurality of second base support surfaces are each in a base support plane, perpendicular to the second wall plane and intersect each other. A rectangular flat cutter blade is clamped to each base support surface.